



**Europass
Curriculum Vitae**

Personal information

First name / Surname **Francesca Liccardo**

Education and Training

Dates **2023-present**
PostDoc Position

Dates **2019-2022**

PhD School in Morphogenesis and Tissue Engineering

Name and type of
organization providing
education and training

Department of Anatomical, Histological, Forensic and Orthopedic Sciences,
University of Rome “La Sapienza”, Italy

*Thesis: Retinoic Acid and proteotoxic stress induce myeloid leukemia progenitors
cells death overcoming the protective effects of the bone marrow niche
mesenchymal cells*

Dates **2017-2019**

Title of qualification awarded

Master in Genetics and Molecular Biology, vote 110/110 with honours

Name and type of
organisation providing
education and training

Department of Anatomical, Histological, Forensic and Orthopedic Sciences,
University of Rome “La Sapienza”, Italy

Thesis: Sviluppo di una strategia terapeutica combinata per indurre la morte cellulare di progenitori mieloidi leucemici

Dates **2013-2017**

Title of qualification awarded Bachelor in Biology, vote 110/110.

Name and type of organisation providing education and training Dept of Biology and Biotechnology "Charles Darwin", University La Sapienza, Rome, Italy

Thesis: La sifilide e Treponema pallidum: l'uso di approcci moderni nella comprensione di un'antica malattia

Dates **2008-2013**

Title of qualification awarded High school diploma

Name and type of organisation providing education and training Liceo Scientifico "Luigi Siciliani", via Turco, 7, Catanzaro, Italy

Personal skills and competences

Mother tongue **Italian**

Other language **English**

Self-assessment

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
Very Good	Very Good	Good	Good	Good

Communication skills Good written and verbal communication skills gained through the relationship with different persons. Capacity to adapt and provide problem-solving strategies. Good capacity to work with a team and interact with group components.

Organizational / managerial skills Good capacity to independently organize the work, respecting deadlines and predetermined aims.

Professional skills and competences **Molecular Biology and protein analysis:**

DNA extraction from cells culture, RNA extraction from cells, cDNA reverse transcriptase and RT-qPCR, PCR, Western-blot, FACS analysis, and confocal microscopy.

Cellular Biology:

Culture and co-culture of cell lines and primary cells, analysis with optical, electronic, and confocal microscopy, immunofluorescence, FACS analysis, trypan blue assay, efluor analysis, cell cycle analysis, oxidative stress evaluation through ROS levels measurement, MTT assay, Wright-Giemsa staining, isolation and analysis of cells from murine blood and bone marrow.

Computer skills and competences

OS and Windows operating systems; European Computer Driving Licence (ECDL) released by AICA (Associazione Italiana per l'Informatica ed il Calcolo Automatico). Good use of Word, PowerPoint, Excel, Adobe Acrobat professional, Adobe Illustrator, Adobe Photoshop, GraphPad-Prism, ImageJ and bibliographic software. Use of biological databases and software (Pubmed, GenBank, Human Protein Atlas, BLAST, Amplify4, circBase). Good use of 7500 Software (Applied Biosystem) 7500 SOFTWARE (Applied Biosystem) and QUANTSTUDIO™ 7 FLEX REAL-TIME PCR SYSTEM, programs for the analysis of Real-Time PCR data. Good use of FCS Express and CytExpert softwares for FACS analysis, ZEN dark and ZEN blue edition for the analysis of confocal microscope acquisitions. Good ability to browse internet.

Other experiences

- Course of "Statistics for Biologists" BeMM PhD School of Biology and molecular medicine, Sapienza University of Rome
- Course of "Enzyme Kinetics" BeMM PhD School of Biology and molecular medicine, Sapienza University of Rome
- "Corso di comunicazione scientifica" BeMM PhD School of Biology and molecular medicine, Sapienza University of Rome
- Course of "Public Speaking" BeMM PhD School of Biology and molecular medicine, Sapienza University of Rome
- Mentoring and research activities for students' degree course in Genetics and Molecular Biology, Sapienza University of Rome: teaching cellular biology and molecular biology techniques.

Additional information

Publications

Total publications: 7

- 1) Iaiza A, Mazzanti G, Goeman F, Cesaro B, Cortile C, Corleone G, Tito C, **Liccardo F**, De Angelis L, Petrozza V, Masciarelli S, Blandino G, Fanciulli M, Fatica A, Fontemaggi G, Fazi F. WTAP and m6A-modified circRNAs modulation during stress response in acute myeloid leukemia progenitor cells. *Cell Mol Life Sci.* 2024 Jun 23;81(1):276. doi: 10.1007/s00018-024-05299-9.
- 2) Cardarelli S, Biglietto M, Orsini T, Fustaino V, Monaco L, de Oliveira doRego AG, **Liccardo F**, Masciarelli S, Fazi F, Naro F, De Angelis L, Pellegrini M. Modulation of cAMP/cGMP signaling as prevention of congenital heart defects in Pde2A deficient embryos: a matter of oxidative stress. *Cell Death & Disease.* 2024 Feb 23; 15(2):169. doi: 10.1038/s41419-024-06549-1.
- 3) **Liccardo F**, Śniegocka M, Tito C, Iaiza A, Ottone T, Divona M, Travaglini S, Mattei M, Cicconi R, Miglietta S, Familiari G, Nottola SA, Petrozza V, Tamagnone L, Voso MT, Masciarelli S, Fazi F. Retinoic acid and proteotoxic stress induce AML cell death overcoming

stromal cell protection. J Exp Clin Cancer Res. 2023 Aug 31;42(1):223. doi:10.1186/s13046-023-02793-z.

- 4) **Liccardo F**, Iaiza A, Śniegocka M, Masciarelli S, Fazi F. Circular RNAs Activity in the Leukemic Bone Marrow Microenvironment. Noncoding RNA. 2022 Jul 1;8(4):50. doi: 10.3390/ncrna8040050. PMID: 35893233; PMCID: PMC9326527.
- 5) Śniegocka M, **Liccardo F**, Fazi F, Masciarelli S. Understanding ER homeostasis and the UPR to enhance treatment efficacy of acute myeloid leukemia. Drug Resist Updat. 2022 Sep;64:100853. doi: 10.1016/j.drup.2022.100853. Epub 2022 Jul 8. PMID: 35870226.
- 6) Palombarini F, Masciarelli S, Incocciati A, **Liccardo F**, Di Fabio E, Iazzetti A, Fabrizi G, Fazi F, Macone A, Bonamore A, Boffi A. Self-assembling ferritin-dendrimer nanoparticles for targeted delivery of nucleic acids to myeloid leukemia cells. J Nanobiotechnology. 2021 Jun 9;19(1):172. doi: 10.1186/s12951-021-00921-5. PMID: 34107976; PMCID: PMC8190868.
- 7) Masciarelli S, Capuano E, Ottone T, Divona M, Lavorgna S, **Liccardo F**, Śniegocka M, Travaglini S, Noguera NI, Picardi A, Petrozza V, Fatica A, Tamagnone L, Voso MT, Lo Coco F, Fazi F. Retinoic acid synergizes with the unfolded protein response and oxidative stress to induce cell death in FLT3-ITD+ AML. Blood Adv. 2019 Dec 23;3(24):4155-4160. doi: 10.1182/bloodadvances.2019000540. PMID: 31834935; PMCID: PMC6929380.

Abstracts in Congresses

- **Liccardo F**, Mazzanti G., Marcotulli M., Cidonio G., Ottone T., Travaglini S., Divona M., Voso M.T., Masciarelli S. and Fazi F. From in vitro to in vivo and back: unraveling treatment responsiveness of AML cells upon the interaction with bone marrow niche mesenchymal cells. XVII Congresso Nazionale SIES 2023, Florence, March 2024.
- **Liccardo F**, Śniegocka M., Ottone T., Divona M., Miglietta S., Familiari G., Petrozza V., Tamagnone L., Voso M.T., Masciarelli S. and Fazi F. Retinoic acid and proteotoxic stress induce AML cell death overcoming bone marrow stromal cell protection. European School of Haematology, Estoril, October 2023.
- **Liccardo F**, Śniegocka M., Ottone T., Divona M., Miglietta S., Familiari G., Petrozza V., Tamagnone L., Voso M.T., Masciarelli S. and Fazi F. Retinoic acid and proteotoxic stress induce AML cell death overcoming bone marrow stromal cell protection. ABCD, Paestum, September 2023.
- **Liccardo F**, Śniegocka M., Ottone T., Divona M., Miglietta S., Familiari G., Petrozza V., Tamagnone L., Voso M.T., Masciarelli S. and Fazi F. Retinoic acid and proteotoxic stress induce myeloid leukemia progenitors cell death overcoming the protective effects of the bone marrow niche mesenchymal cells. European School of Haematology, London, February 2023.
- Masciarelli S., **Liccardo F**, Śniegocka M., Divona M., Travaglini S., Ottone T., Miglietta S., Familiari G., Petrozza V., Tamagnone L., Voso M.T., Fazi F. Use of the combination of retinoic acid and proteotoxic stress as a therapeutic strategy to target FLT3-ITD⁺ myeloid leukemic cells. XVII Congresso Nazionale SIES 2022, Rome, March 2022
- Masciarelli S., Capuano E., **Liccardo F**, Śniegocka M., Ottone T., Lo-Coco F., Fazi F. Retinoic acid synergizes with the unfolded protein response and oxidative stress to induce AML cell death. 5th International Conference Acute Myeloid Leukemia “Molecular and Translational”: Advances in Biology and Treatment, Estoril, (Portugal), October 2019.

	<p>- Masciarelli S., Capuano E., Liccardo F., Sniegocka M., Ottone T., Lo-Coco F., Fazi F. Retinoic acid synergizes with the unfolded protein response and oxidative stress to induce AML cell death. ABCD Congress 2019, Bologna, September 2019</p> <p>- Masciarelli S., Capuano E., Liccardo F., Ottone T., Lo-Coco F., Fazi F. Development of a combination strategy based on ER and oxidative stress in Acute Myeloid Leukemia. Gordon Research Conference on Stress Proteins in Growth, Development and Disease, Lucca, June 2019</p>
Invited talks in Congresses	<p>- Liccardo F., Sniegocka M., Ottone T., Divona M., Miglietta S., Familiari G., Petrozza V., Tamagnone L., Voso M.T., Masciarelli S., Fazi F. Retinoic acid synergizes with proteotoxic stress to induce cell death of FLT3-ITD⁺ acute myeloid leukemia progenitor cells. National PhD Meeting, Salerno, March 2022.</p> <p>- Liccardo F., Sniegocka M., Ottone T., Divona M., Miglietta S., Familiari G., Petrozza V., Tamagnone L., Voso M.T., Masciarelli S., Fazi F. Retinoic acid synergizes with proteotoxic stress to induce cell death of FLT3-ITD⁺ acute myeloid leukemia progenitor cells. Sessione Scientifica del Collegio Docenti di Istologia ed Embriologia, online session, February 2022.</p>
Best Poster Award	<p>- Masciarelli S., Liccardo F., Sniegocka M., Romano V., Ottone T., Travaglini S., Miglietta S., Nottola S. A., Familiari G., Petrozza V., Tamagnone L., Voso M.T., Fazi F. Bone marrow stromal cells support acute myeloid leukemia stem cells enhancing antioxidant defenses. 75° Congresso Nazionale SIAI, Padua, September 2022</p>
Best PhD thesis Award	<p>Prize in memory of Sergio Adamo for the best presentation and scientific research of the Cycle XXXV of Morphogenesis and Tissue Engineering PhD School, February 2023</p>
Best oral presentation Award	<p>- Liccardo F., Sniegocka M., Tito C., Iaiza A., Ottone T., Divona M., Mattei M., Cicconi R., Miglietta S., Familiari G., Nottola S.A., Petrozza V., Tamagnone L., Voso M.T., Masciarelli S. and Fazi F. Retinoic acid and proteotoxic stress induce acute myeloid leukemia cell death, overcoming the protective effects of the bone marrow niche stromal cells. Scientific session of Collegio Docenti di Istologia, Rome, February 2023</p>
Other attended Congresses	<p>- 2nd School of Acute Leukemia (SOHO Italy), Rome, June 2022</p> <p>- SIBBM “Frontiers in Molecular Biology” Seminar: the RNA World 3.0, Rome, June 2022</p> <p>- MINISIMPOSIO SU SPERIMENTAZIONE ANIMALE IN BIOMEDICINA - Sperimentazione animale: aspetti storici, etici, giuridici – September 2021</p> <p>- SOHO 3rd ITALIAN CONFERENCE – September 2021</p> <p>- 74° Congresso Nazionale SIAI 2021 – 24 September 2021</p> <p>- MINISIMPOSIO SU SPERIMENTAZIONE ANIMALE IN BIOMEDICINA - Ricerca sui primati non umani: quando, come e perché – March 2021</p>

- Third International Workshop on Tumor Evolution (IRE) - Discovering and targeting therapeutic vulnerabilities in the tumor microenvironment - March 2021

- X BeMM Symposium - PhD School of Biology and molecular medicine, Rome 22 November 2019

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